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December 23, 1946

PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

DEC 2 J 1946

THREE NEW MITES FROM RATS IN PUERTO RICO

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The following new species of mites were found in the course of an ectoparasite survey of the rats of San Juan, Puerto Rico. At present, it is not possible to say whether they are parasitic on rats or simply associated with them. Types of these new species are in the entomological collection of the Department of Medical Zoology, School of Tropical Medicine, San Juan, Puerto Rico.

Family Laelaptidae

Androlaelaps setosus, new species

Female. Body oval in shape, longer than broad, well provided with setae: Total length, not including capitulum, .69 mm., width, .41 mm. Chelicerae prominent, toothed, fixed arm with a process. Sternal plate (Fig. 1) sculptured, broadest between coxae II and III with the corners acuminated. First pair of sternal setae on the anterior border of the sternal plate, second pair more or less level with the middle of coxa II, third pair of setae and the sternal porcs placed as usual. Metasternal plates not heavily sclerotized, their setae level with the posterior borders of coxae III. Genito-ventral plate long and broad, more or less rounded posteriorly, almost reaching to the anal plate. Only one pair of setae-the genital pair-is present. Flanking the genito-ventral plate are three pairs of setae, the middle pair being in a very slight concavity of the plate. Approximately 15 setae are situated on each side laterad to the genito-ventral plate. A small narrow, more or less boatshaped plate is present on each side posterior to coxa IV; below this is a much smaller, circular one. Anal plate broadly triangular, bearing the usual three setae. Peritremes extending posteriorly to beyond the middle of coxae IV, extending anteriorly to beyond coxae I. Stigmal pore level with the posterior border of coxa III, distant from the lateral edge of the body. Legs well provided with normal setae. Leg II broad. characteristic of the genus, femur with a long, stout spur, genu with a smaller one, tibia with a long sharp one, and tarsus with several pairs of setae. Dorsal plate covering most of the dorsal surface, provided with many long and stout, curved setae.

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Type material. Female holotype and female paratype from *Rattus norvegicus* at San Juan (Santurce), Puerto Rico, collected September 18, 1946.

This new species resembles A. oudemansi Radford from which it differs in that the genito-ventral plate almost reaches to the anal plate, as well as in other respects.

Family Macrochelidae

Macrocheles alatus, new species

Female. Body oval, sparsely provided with setae; total length not including capitulum, .53 mm., width .32 mm., chelicerae robust, with prominent uneven teeth. Sternal plate (Fig. 2) expanded laterally, with three pairs of setae and two pairs of pores, the latter removed from the insertions of the setae. Metasternal setae not conspicuous, situated on small, weakly sclerotized plates. Genito-ventral plate weakly sclerotized, truncate posteriorly, bearing a single pair of setae; anteriorly with superimposed wing-like plates. Anal plate large and conspicuous, shieldshaped, provided with six setae in addition to the anal ones. Anal pore small, lyre-shaped, situated near the posterior border of the anal plate, its setae all of about the same size. Approximately seven setae are present on each side of the anal plate. Peritremes closely appressed to the lateral borders of the body, not extending posteriorly to the stigmal pore, reaching anteriorly to or beyond the anterior border of coxae I. Dorsal plate not occupying the entire dorsum, provided with setae and sculptured. Legs, characteristic of the genus, I long and slender without claws, II, III and IV broad with prominent claws and stout setae.

Type material. Female holotype from Rattus norvegicus at San Juan (Santurce), Puerto Rico, collected February 9, 1946.

This new species is readily differentiated from the other members of

Tomily Assoids

its genus by the shape of the anal plate.

Family Ascaidae

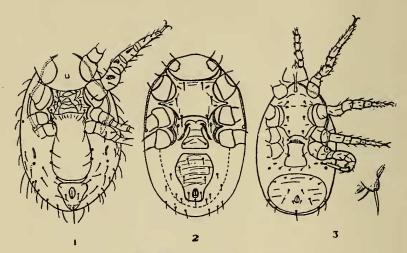
Asca duosetosa, new species

Female. Body oval, longer than broad, well provided with setae. Total length, not including capitulum, .40 mm., width, .24 mm. Chelicerae toothed. Palpus (Fig. 3) with a prominent spur on the inner surface of the second and third joints. Sternal plate with the structure not clear, apparently weakly sclerotized anteriorly, extending from behind coxae I to the middle of coxae III. First pair of sternal setae in the anterior weakly sclerotized portion of the plate with the first pair of pores just below them; other two pairs of sternal setae and the second pair of sternal pores placed as usual. Metasternal setae inconspicuous, situated on small lightly sclerotized circular plates. Genital plate weakly sclerotized with a single pair of setae, of the shape shown in Figure 3. Between the genital plate and the ventro-anal plate are four setae. Ventroanal plate sculptured, more or less oval in shape, bearing eight setate in addition to the anal ones. Stigmal pore on a level with the middle of coxae IV, peritremes extending anteriorly to beyond the anterior borders of coxae I. Legs as usual for the genus, provided with many

small setae. Dorsal plate divided in two, the conspicuous line of division on a level with the middle of coxae IV, sculptured and provided with many stout scimitar-like setae. The posterior lateral border of the notogaster bears on each side the tubercle characteristic of the genus, and the tubercle is armed with two large prominent setae (Figure 3).

Type material. Female holotype and female paratype from Rattus norvegicus at San Juan (Santurce), Puerto Rico, collected September 17, 1946.

This new species is similar to A. quinquesetosa Wharton differing from the latter in having two setae on the posterior dorsal tubercle instead of five.



Explanation of Plate XVI

- Fig. 1. Androlaelaps setosus n. sp. Ventral plates and leg II.
 Fig. 2. Macrocheles slatus n. sp. Ventral plates.
 Fig. 3. Asca duosetosa n. sp. Ventral view and dorsal tubercle.